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Affix Bar Code Label Here	

WHIMS STUDY

Form A

Phase 2:

Administration and Scoring Manual

WHIMS ADMINISTRATION AND SCORING MANUAL

General Instructions to Technician

Administer the cognitive tests included in this packet according to instructions provided to insure that the data obtained are reliable and valid. Specific instructions are provided on the page facing each test score sheet. If you have questions you may call the WHIMS Central Coordinating Center at Wake Forest University School of Medicine (WFUSM).

Each WHIMS task should be administered in the order in which it is presented.

Getting ready for the interview:

Affix a participant barcode label to the cover pages of the Administration and Scoring Manual and the Participant Booklet. Record the date and technician ID. Review the administration instructions and check to see that you have all the materials needed for testing:

- Phase 2: Administration and Scoring Manual
- Phase 2: Participant Booklet
- CERAD Boston Naming Test (green flipbook)
- CERAD Word List Memory Task and Delayed Recognition Test (blue flipbook)
- Stopwatch
- Clipboard
- Pencils
- Tape recorder and blank tapes

Think of yourself as part of the instrumentation. Standardize your behavior during testing and across participants.

Spend a few minutes putting the participant at ease by chatting. Some people relax with a few minutes of light general conversation. Avoid discussing problem areas or the tests to follow.

When she is ready, say something like:

"Now we are going to do a few tasks that involve memory, reading words, drawing, and other things. Then I'll ask you some general questions about how you are doing. It should take us about 1 hour to complete everything. Each task has been designed to challenge you. That is, some tasks will be easy and others will be harder. You should not worry about how well you are doing, just try to give each one your full attention and do the best you can. I will tell you what you need to do before each task. I cannot tell you how you did or offer any help. Any questions?" (Answer questions).

During the interview:

Follow the administration instructions for each task. Verbatim instructions are provided when indicated. Know when you should prompt and when you should not.

Offer generic phrases of encouragement ("That's fine" or "You're doing alright.") during and between tasks but <u>do not</u> offer any information on the correctness of a particular response (including nonverbal communication like nodding or shaking your head). If a participant continues to ask, explain that you cannot give feedback ("Sorry, but I'm not permitted to tell you how you are doing").

Do not offer any assistance in completing tasks that is not specifically permitted in the instructions.

<u>Do not</u> place score sheets so the Participant can see them. Use a clipboard or other device to shield the results.

Be aware of the placement of the tape recorder. It is important that both the interviewer and the participant's voices can be heard. You may need to ask the participant to speak louder if her voice becomes too soft during the tasks.

Observe the Participant for signs of strain or stress (e.g., becomes nervous, puts less effort into tasks, starts making excuses). If observed, try to relax her by offering generic reassurances and encouragement (e.g., "You're doing fine", "We can take a break in a few minutes if you like"). You may take a break at certain points during the interview and testing sequence. Do not take a break until after the completion of the Trail Making task unless absolutely necessary. If you take a break, offer the Participant a drink of water or trip to the restroom. Remind the Participant that these tasks are designed to be difficult in places.

After the interview:

<u>Do not</u> tell the Participant how she did (other than to say "Fine").

Quickly review all testing materials for completeness.

After the interview, go back over the Administration and Scoring Manual and score all the questions according to the instructions for each task. Then record the scores on the data summary sheets.

Verify that all the test and interview materials are stapled securely together.

WHIMS Participant questions and suggested responses:

- Q: "How did I do?"
- A: Say something like: "You did fine."... "Nobody gets all of the questions right."... "I have not tallied the results yet."
- Q: "Am I demented (sick, crazy, etc.)?"
- A: Say something like: "These tasks don't diagnose illness (dementia)."... "You did fine."... "One of our study doctors will talk with you and look at these results. You may ask him/her."
- Q: "Will I have to repeat these tests again?"
- A: Say something like: "You may not have to repeat these. But if you do, it won't be for another year."

VERBAL FLUENCY: "ANIMAL CATEGORY"

Administration

Say to the participant:

"I am going to give you a category and I want you to name, as fast as you can, all of the things that belong in that category. For example, if I say 'articles of clothing,' you could say shirt, tie or hat. Can you think of other articles of clothing?"

Wait for the participant to give two words. If she succeeds, indicate that the responses are correct and proceed to the test itself. If the participant gives an inappropriate word or reply, correct the response and repeat the instructions. If the participant fails to respond, repeat the instructions. If it becomes clear that the participant still does not understand the instruction, terminate this task, and record "DC," for discontinued, in the Total Word Count boxes at the bottom of page 5.

After you are satisfied that the participant understands the task and has given two words naming articles of clothing, say:

"That is fine. I want you to name all of the things that belong to another category, that is, 'animals.' You will have one minute. I want you to tell me all the animals you can think of in one minute. Ready, begin."

Allow only one minute. Record all animals named in 15 second intervals in the appropriate section. If the participant discontinues before the end of the time period, encourage her to try and find more words. If she is silent for 15 seconds, repeat the basic instruction ("I want you to tell me all the animals you can think of"). If she asks "Do you want 4-legged animals?" reply "Any animal." No extension on the time limit is made in the event that the instruction is repeated in the course of administration.

Scoring Instructions

The participant's score is the sum of acceptable "animals" given in each 15 second interval. Anything not vegetable or mineral is an animal. Any member of the animal kingdom, real or imaginary, is scored correct, except repetitions and proper nouns. Specifically, each of the following gets credit: a species name and accompanying breeds within the species; male, female and infant names of a species. For example:

Responses	<u>Points</u>
dog	1
terrier	1
dachshund	1
mutt	1
brown dog	0 - repetition
puppy	1
bitch	1
Fido	0 - Proper noun
unicorn	1
amoeba	1
baby dog	0 - repetition
grizzly bear	1
brown bear	1

Verbal Fluency Categories

"I am going to give you a category and I want you to name, as fast as you can, all of the things that belong in that category. For example, if I say 'articles of clothing,' you could say shirt, tie, or hat. Can you think of other articles of clothing?"

"That is fine. I want you to name all of the things that belong to another category, that is, 'animals.' You will have one minute. I want you to tell me all the animals you can think of in one minute. Ready, begin."

Time Interval		Anima	ls	
15				
16				
45		-		
46				
Word Count:	0-15 sec:	16-30 sec:	31-45 sec:	46-60 sec:
		Total Word Count:		

BOSTON NAMING TEST

Administration

Say to the participant:

"Now I am going to show you some pictures and I want you to say the name of each picture."

Present the 15 line drawings in the CERAD Boston Naming Test flip book to the participant. For each picture, ask the following until the participant begins to name the pictures on her own:

"What is the name of this object?" or "Can you name this?"

Record all responses. <u>Correct</u> responses may be recorded using an abbreviation. For example, you may list only the first letter of a correct response instead of the entire word. You may create your own abbreviations but stay consistent. <u>Incorrect</u> responses should be recorded verbatim. If the response is incorrect, reassure the participant (e.g., "**That's fine.**") and go to the next item. Allow a maximum of ten seconds for each picture. If the participant can not recall a name, reassure her (e.g., "**That's OK.**") and move on to the next item.

Use a prompt for responses that indicate only a part of the picture, e.g., "mattress" for "bed" or "ice" for the "tongs" item (Point to the picture with your pencil or pen and outline the item). Score as incorrect if the designated/required response does not follow.

Semantic or phonetic cues should <u>not</u> be used. A non-specific prompt can be used if the response is too general. For example, if the response to the "canoe" item is "boat", say "**Is there another name for that?**" You may <u>NOT</u> ask "Isn't that a special kind of boat?" Likewise, if a response of "harp" is given for the "harmonica" item, prompt for the more specific correct response. If none is given, score as incorrect. Examples of alternative acceptable responses are given below.

Scoring Instructions

<u>Item</u>

If the participant makes an error but corrects it spontaneously, score the response as correct. The participant's score is the number of correctly named low, medium, and high frequency items.

In general, a more specific correct response is acceptable. For example, a response of "daisy" to the "flower" item is correct.

Regional terms and synonyms, if verified, are counted as correct.

	-
house	schoolhouse hospital
	•
	home
harmonica	mouth organ
	French harp
	•
	blues harp
hammock	swing (colloquial term in the rural South)
tongs	pinchers
tongs	
	pincers
mask	doe face
	false face
	14100 1400

Acceptable Responses

Note: "Dice" is not a correct response for "Dominoes" and it does not warrant a prompt. Score "Dice" as incorrect.

Boston Naming Test

(Maximum time: 10 seconds per picture)

"Now I am going to show you some pictures and I want you to say the name of each picture."

<u>Picture</u>	Response	Incorrect	Correct
[HIGH]			
Tree			
Bed			
Whistle			
Flower (daisy)			
House [MEDIUM]		 0	
_			
T 41 D 1			
Volcano			
Mask			
Camel [LOW]			
Harmonica			
Tongs			
Hammock			
Funnel			
Dominoes			
Pictures Correct:			
[HIGH]			
[MEDIUM]			
[LOW]			
[TOTAL]	☐		

WORD LIST MEMORY TEST

Administration

To assess participants' ability to remember newly learned information, we administer this free recall task, using 10 common nouns. To insure that participants are familiar with and attend to each word, they are asked to read the words printed on separate cards in the CERAD Word List Memory Test flip books. Present the ten words on the flip cards at a constant rate and then ask her to immediately recall as many as possible. There are three trials, each of which presents the words in a different order.

Say to the participant:

"I am going to show you ten printed words. Read each word out loud as I show it to you. Later I will ask you to recall all ten words."

Show the words in the first trial at the rate of one word every two seconds. If the participant cannot read the word, say it for her and check the "can't read" column for that word on the Response Sheet. If the participant misreads the word (i.e., "shone" for "shore"), then ask her to reread the word. If she misreads it again, say the word correctly and ask the participant to repeat it. If the participant later recalls the incorrect word (i.e., "shone"), it is scored as an incorrect response.

After the last word in the first trial has been read, say "Tell me what words you remember." Allow a maximum of 90 seconds for the first recall period. Check the box to the right of each word if the participant recalls the word during the 90-second recall period. Write any recalled word not on the list in use in the intrusions lines. Continue with the second and third sets of words in the same way, changing your instructions slightly to encourage the participant. "Now let's do it again." If the participant gives up before 90 seconds, move on to the next trial. If the participant recalls all the words in less than 90 seconds, wait 5-10 seconds to make sure she is not going to enter any intrusions, then ask "Are you finished?"

Scoring Instructions

The participant's score for each trial is the number of words correctly recalled and checked in the "Correct Recall" column. Record on each trial the number of words that the participant "recalls" that are not on the list (intrusions). The Total Score is the sum of words correctly recalled for all three trials (i.e., Trial 1 Correct + Trial 2 Correct + Trial 3 Correct = Total Score). Also, sum the number of intrusions for each trial to get the Total Intrusion Score.

Word List Memory Test

"I am going to show you ten printed words. Read each word out loud as I show it to you. Later, I will ask you to recall all ten words." (Exposure time: 1 word every 2 seconds; Recall time: 90 seconds per trial maximum.)

<u>Trial 1</u>		<u>Trial 2</u>	1	<u>Trial 3</u>	
Can't Correct			Correct		Correct
Recal Recal	_		Recall		Recall
Butter	T	icket	\sqcup \sqcup	Queen	
Arm	С	Cabin		Grass	
Shore	В	Sutter		Arm	
Letter	l s	hore		Cabin	
Queen	Е	Engine		Pole	
Cabin	A	arm		Shore	
Pole	Q	Queen		Butter	
☐ Ticket ☐	L	etter		Engine	
Grass	P	ole		Ticket	
Engine	G	Grass		Letter	
Intrusions:	Ir	ntrusions:		Intrusions:	
	_				
					
Totals:					
Can't Read:					
			- 1		
Number Correct:			- 1		
Number of Intrusions:					
Total Score (Trial 1 Correct + Trial 2 Correct +	Correct + Trial 3	Correct) =			
Total Intrusion Score (Trial 1 + Trial 2	2 + Trial 3) -				

CONSTRUCTIONAL PRAXIS

Administration

Hand the participant a pencil with an eraser. Say to the participant:

"Now I'm going to ask you to draw some figures. Some are simple and some are more complicated."

Point to Item #1 on page 1 of the Participant Booklet and say: "Now, here is a circle I would like you to draw. Make a copy just below it." Wait up to two minutes for completion.

Next, turn the page to Item #2, point to the figure and say: "Now here's a drawing of a diamond. Make a copy as best you can, just below it." Wait up to two minutes for completion.

Turn the page of the Participant Booklet, point to Item #3 and say: "That's fine. Now draw this third figure." Wait up to two minutes.

Present item #4 and say: "This is the hardest figure to draw, but take your time." Wait up to two minutes for completion.

Repeat the instructions once if the participant does not understand the first time. If the participant cannot draw the figure in two minutes, reassure her and turn to the next figure. Participants are allowed to erase errors and should use a pencil. Allow multiple self-starts. Do not encourage repeated attempts. Score the last attempt or the one indicated by the participant.

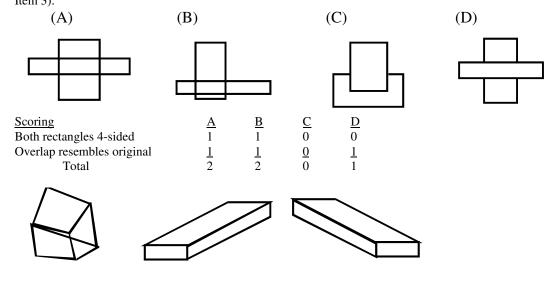
Remove the Participant Booklet from view upon completion of this test.

Scoring Instructions

Only score what is on the page. Do not complete the drawings in your head.

Special Scoring Details

Items 1) and 2): Circle and diamond enclosures allow 1/8 inch gap. Use a ruler if you are unsure of the width of the gap. Item 2): The longest side may not be more than twice the length of the shortest side. Item 3):



Item 4):					
(A)	(B)			(C)	
Scoring	<u> </u>	<u>\</u>	<u>B</u>	<u>C</u>	
Three dimensional	0		1	1	
*Frontal face correctly oriented	! 1		1	1	
Internal lines correctly drawn	0		0	0	
Opposite sides parallel -	0		<u>1</u>	<u>1</u>	(Use a protractor to determine "within 10°")
Total	1		3	3	-

^{*}Cube face may be oriented left or right, depending on individual perception.

Constructional Praxis

(Maximum time: 2 minutes per figure)

		Incorrect	Correct
Item #1 Circle			
a) closed circle (w	ithin 1/8")		
b) circular shape		0	
Item #2 Diamond			
a) draws 4 sides			
b) closes all 4 ang (within 1/8")	les of figure		
	mately equal length nay not be greater than t		f the shortest side)
Item #3 Rectangles			
a) both figures are	4-sided		
b) overlap resemb	les original		
Item #4 Cubes			
a) figure is 3-dime	ensional		
b) frontal face corr (may be right o	•		□,
c) internal lines co	rrectly drawn		
d) opposite sides a (within 10°)	re parallel	0	
TOTAL CORRECT:	Item #1	(MAX :	= 2)
	Item #2	(MAX :	= 3)
	Item #3	(MAX :	= 2)
	Item #4	(MAX :	= 4)
TOTAL SCORE:		(MAX :	= 11)

WORD LIST RECALL

Administration

This task is to determine how well participants can remember the words presented in the Word List Memory Test.

Say to the participant:

"A few minutes ago I asked you to learn a list of ten words which you read one at a time from cards. Now I want you to try to recall as many of those 10 words as you can. O.K., now tell me as many of those ten words as you can remember."

Allow the participant a maximum of 90 seconds. Check the box next to each word correctly recalled.

Scoring Instructions

Score the number of words correctly recalled. Also record and score the number of words not on the list (intrusions) that the participant reports. Record under "Intrusions" any word recalled that is not on the list.

Word List Recall

Say to the participant:

"A few minutes ago I asked you to learn a list of ten words which you read one at a time from cards. Now I want you to try to recall as many of those 10 words as you can. Ok, now tell me as many of those 10 words as you can remember." (Maximum time: 90 seconds)

	Check each word as it is recalled
Arm	
Butter	
Cabin	
Engine	
Grass	
Letter	
Pole	
Queen	
Shore	
Ticket	
Intrusions:	
Totals:	
Correct:	
Intrusions:	

WORD LIST RECOGNITION

Administration

Say to the participant:

"Now I am going to show you a set of words printed on cards. Some of the words are from the list you saw earlier and some of the words I haven't shown you before. I want you to say YES if the word I show you is one you saw earlier."

Show the first word and say:

"Is this one of the words you saw earlier?"

Repeat the question or say "How about this one?" for each word. Record the participant's response. Only accept "yes" or "no" responses. If the participant says, "I don't know," then say "Please give your best guess by answering yes or no." This section is not timed.

Scoring Instructions

The scores for this test include the number of correctly recognized words previously seen (correct "Yes" responses) and the number of correctly rejected new words (correct "No" responses). Calculate this score by adding the number of shaded boxes checked in the "YES" column and the "NO" column. Record these subtotals in the appropriate boxes (Total YES correct and Total NO correct) and sum them to get the Total Correct Responses.

Word List Recognition

"Now I am going to show you a set of words printed on cards. Some of the words are from the list you saw earlier and some of the words I haven't shown you before. I want you to say YES if the word I show you is one you saw earlier." (Only YES or NO responses are acceptable).

	•	"YES"	"NO"	
Church Coffee Butter* Dollar Arm*			, , , ,	
Shore* Five Letter* Hotel Mountain			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
Queen* Cabin* Slipper Pole* Village			, , ,	
String Ticket* Troops Grass* Engine*				
	Total YES Correct: (MAX=10)	+ Total NO Correct (MAX=10)	: = =	Total Correct Responses (MAX=20)

^{*}Original word from Word List Memory Task

CONSTRUCTIONAL PRAXIS - RECALL

Administration

Say to the participant:

"A while ago I showed you some drawings on separate pieces of paper. You looked at each drawing and then drew it on the same sheet of paper. Do you remember them? I would like you to draw them on this sheet, this time from memory."

Place the Participant Booklet in front of the participant, turn to the blank C-P Recall page, and allow the participant to begin drawing. Allow a maximum of 8 minutes. Otherwise, end the task when the participant indicates she has finished.

Code in the column those drawings that are recalled without prompting. If any of the figures are omitted, give neutral prompt: "**Do you remember any other figures?**" Record in the column "Recall with prompt."

Scoring Instructions

In the boxes at the bottom of the page, code the total for each item, regardless of whether it was recalled or prompted. Items that are not recalled receive a score of 0. Items recalled but not completely correct get partial credit as indicated.

If the participant draws a figure not previously presented (e.g., intersecting pentagons from Form 39), you may prompt by saying, "**Do you remember any other figures?**"

Constructional Praxis - Recall

"A while ago I showed you some drawings on separate pieces of paper. You looked at each drawing and then drew it on the same sheet of paper. Do you remember them? I would like you to draw them on this sheet, this time from memory." (Maximum time: 8 minutes)

		Red <u>No</u>	call <u>Yes</u>		Recall w	ith Prompt Yes
Item #1 Circle		110	103		110	103
a) closed circle (with	in 1/8")	0				
b) circular shape		0			0	
Item #2 Diamond						
a) draws 4 sides						
b) closes all 4 angles (within 1/8")	of figure				0	
c) sides of approxima (the longest side m	ately equal length any not be greater than	n twice the ler	gth of the sho	ortest sid	le)	
Item #3 Rectangles						
a) both figures are 4-	sided	0				
b) overlap resembles original		0				
Item #4 Cubes						
a) figure is 3-dimensi	onal	0			0	
b) frontal face correc (may be right or le	·	0			0	
c) internal lines corre	ctly drawn		\square ,			
d) opposite sides are (within 10°)	parallel					
If any of the figures are omitted column "Recall with prompt."	, give neutral prompt	:: "Do you rei	nember any	other fi	gures?" R	Record in the
TOTAL CORRECT:	Item 1 (M	AX = 2)				
	Item 2 (M	AX = 3)				
	Item 3 (M	AX = 2)				
	Item 4 (M	AX = 4)				
TOTAL SCORE:	[[(M	IAX = 11)				

TRAIL MAKING TEST PART A

Sample

Administration

The technician may want to sit to the side of the participant for the Trail Making Test Part A and B in order to quickly identify any errors. If the participant is right-handed sit on her left side and if she is left-handed sit on her right side.

Place the sample item in the Participant Booklet on a table in front of the participant. Give the participant a pencil. Say "On this page [point] are some numbers. Begin at number 1 [point to 1] and draw a line from 1 to 2 [point to 2], 2 to 3 [point to 3], 3 to 4 [point to 4] and so on, in order, until you reach the end [point to the circle marked "end"]. Draw the lines as fast as you can. Ready? Begin!"

If the participant makes a mistake point out the error and explain it. If necessary guide the participant's hand through the trail, eraser end down. Then say "Now you try it," and repeat the original directions starting with "Begin at number 1..." Repeat instructions with guidance twice. If the participant still does not understand, terminate TRAILS, Part A and B and go on to the next task (Participant Interview).

If the participant completes the sample item correctly and shows that she understands the task say, "Good!" Let's try the next one." and continue on to the Part A test.

Test

Turn to the Part A and say: "On this page are numbers from 1 to 25. Do this the same way: Begin at number 1 [point to 1] and draw a line from 1 to 2 [point to 2], 2 to 3 [point to 3], 3 to 4 [point to 4] and so on, in order, until you reach the end [point to 25]. Remember, work as fast as you can. Ready? Begin!"

Start timing as soon as the instruction is given to begin. Allow a maximum of 300 seconds for the task. WATCH CLOSELY TO CATCH ERRORS (i.e., CONNECTING DOTS NOT IN SEQUENCE); IDENTIFY AN ERROR IMMEDIATELY AFTER SHE MAKES IT. Draw a short perpendicular line through the incorrect line. Tell the participant to proceed from the number where the mistake occurred. (That is, from the last number that was correctly connected). DO NOT STOP TIMING.

At end say "That's fine."

Scoring Instructions

Record total time to complete Part A (in seconds). Record the number of circles connected and record the number of errors. If participant makes 5 errors or exceeds 300 seconds, discontinue the test and record "DC" for total time on page 19.

Trail Making Test Part A

Number of Circles Connected (MAX = 25):
Total Time (MAX = 300 seconds):
Note: Convert all times to <u>SECONDS</u> . For example, 1'45" should be written as "105 seconds," not "145".
Errors:

TRAIL MAKING TEST PART B

NOTE: (This test should be administered only if Part A is completed)

Sample

Administration

Say to the participant:

"On this page are some numbers and letters. Begin at number 1 (point to 1) and draw a line from 1 to A (point to A), A to 2 (point to 2), 2 to B (point to B), B to 3 (point to 3), 3 to C (point to C), and so on in order, until you reach the end (point to the circle marked end). Remember, first you have a number (point to 1), then a letter (point to A), then a number (point to 2), then a letter (point to B) and so on. Draw the lines as fast as you can. Ready? Begin."

If the participant makes a mistake point out the error and explain it. If necessary guide the participant's hand through the trail, eraser end down. Then say "**Now you try it,**" and repeat the original directions starting with "**Begin at number 1...**" Repeat instructions with guidance twice. If the participant still does not understand, terminate TRAILS, Part B and go on to the next task (Participant Interview).

If the participant completes the sample item correctly and shows that she understands the task say, "Good! Let's try the next one." and continue on to the Part B test.

Test

Say to the participant:

"On this page are both numbers and letters. Begin at number 1 (point to 1) and draw a line from 1 to A (point to A), A to 2 (point to 2), 2 to B (point to B), B to 3 (point to 3), 3 to C (point to C) and so on, in order, until you reach the end (point to the circle marked end). Remember first you have a number, then a letter, then a number, then a letter, and so on. Do not skip around, but go from one circle to the next in the proper order. Draw the lines as fast as you can. Ready? Begin."

Start timing as soon as the instruction is given to begin. Allow a maximum of 300 seconds for the task. WATCH CLOSELY IN ORDER TO CATCH ANY ERRORS AS SOON AS THEY ARE MADE. If the participant makes an error, identify it immediately, draw a perpendicular line through the incorrect line, and tell her to proceed from the number or letter where the mistake occurred. (That is, from the last number or letter that was correctly connected). DO NOT STOP TIMING.

Scoring Instructions

Record time in seconds and list the number of errors made. If participant makes 5 errors or goes over 300 seconds, discontinue the test and record "DC" for the total time on page 21.

Trail Making Test Part B

Number of Circles Connected (MAX = 25):
Total Time (MAX = 300 seconds):
Note: convert all times to SECONDS. For example, 1'45" should be written as "105 seconds," not "145".
Errors:

Behavioral and Psychiatric Symptoms

NOTE: This is an appropriate time to allow the participant to take a short break.

Administration

Read the instructions and the questions to the participant. Check either "yes" or "no" in the appropriate box. Record any information relevant to the participant's response in the "Notes" column. A "yes" is always coded "yes" as long as it occurred during the appropriate time frame. A "maybe" response is also coded as "yes".

Be aware that the time frame changes for each section of the interview.

Major Depression:

Time frame: Nearly every day for the last two weeks.

- 1. Sleep difficulty: This questions asks about any type of problem with going to sleep, staying asleep once someone has gone to sleep, or oversleeping.
- 2. Feeling tired: This question includes any aspect of fatigue and lack of energy, no matter how it is phrased by the participant. Accept as "yes" answers like "feeling drained, exhausted, worn out, weary, down and out...".
- 3. Poor appetite or overeating: This question asks about a problem with eating, including both eating too much and eating too little. Ask all participants, regardless of their response on Part A, about their weight gain or loss. Ask for their best guess if they do not remember.
- 4. Little interest or pleasure: This question assesses the amount of interest, enthusiasm, or pleasure the participant has had in everyday activities. "Yes" responses include "everything seems flat or dull; social activities don't seem to be fun anymore; I haven't been enjoying things the way I used to..."
- 5. Feeling down: This question asks about depressed feelings. Accept any word as "yes" that describes negative, sad feelings.
- 6. Feeling bad about yourself: This question asks about feelings of inadequacy and self-blame. Score as "yes" any response that means the participant blames herself or feels that events are her fault.
- 7. Trouble concentrating: This question asks for problems associated with thinking or paying attention. Score as "yes" any answer that indicates difficulty with thinking or focusing on a task.
- 8.a. Being fidgety or restless: This question asks about agitation or anxiety. Accept as "yes" responses that indicate nervousness, agitation.... A "yes" response means that you do not have to ask the second half of #8 (moving or speaking slowly).
- 8.b. Moving or speaking slowly: This question assesses a lack of energy associated with mobility and speech. Code as "yes" responses like "haven't felt like talking; little energy for moving/getting up and down..."
- 9. Better off dead: This question asks about suicidal thoughts or ideas. A "yes" response means that you should notify the PI.

Behavioral and Psychiatric Symptoms

"Now I am going to ask you about some specific changes in your mood and behavior during the past couple of weeks. I'll be making some notes as we go along."

MAJOR DEPRESSION: "DURING THE LAST TWO WEEKS, have you had any of the following problems NEARLY EVERY DAY?" (Read each item to the participant and check the box.)

<u>NE</u>	ARLY EVERY DAY?" (Read each item to the participant and ch	eck the box.)		
1. 2.	"Trouble falling or staying asleep, or sleeping too much?" "Feeling tired or having little energy?"	Yes	No 	Notes
"Fe	or the last two weeks, have you had any of the following			
pro	blems <u>nearly every day</u> ?"			
3.	a. "Poor appetite or overeating?"			
	b. "How much weight have you gained or lost during the	Amount of		
	past 2 weeks not due to intentional dieting?"	Weight change	=	
4.	"Little interest or little pleasure in doing things?"	Ц	Ш	
pro 5.	or the last two weeks, have you had any of the following blems nearly every day?" "Feeling down, depressed or hopeless?" "Feeling bad about yourself or that you are a failure or have let yourself and your family down?"	=		
"Fe	or the last two weeks, have you had any of the following			
pro	blems <u>nearly every day</u> ?"	_	_	
7.	"Trouble concentrating on things, like reading the newspaper or watching television?"	Ц	Ц	
8.	"Being so fidgety or restless that you were moving around a			
9.	lot more than usual?" [If 'No':] "What about the opposite moving or speaking so slot that other people could have noticed?" [Code 'Yes' if 'Yes' to either question] "In the last two weeks, have you frequently thought you would be better off dead or of hurting yourself in some way?" [If 'Yes", notify your PI]	owly		
То	the interviewer:		_	
10	Total number of "Yes" answers for #1-9:			
10.	[Five or more = Probable Major Depressive Disorder]		_	

Panic

Panic Disorders are anxiety disorders that are more commonly seen in women. The illness has a specific set of physical and emotional symptoms. The symptoms include shortness of breath, palpitations, chest pain, choking, GI distress, sense of the unreal, afraid of dying or losing one's mind.

- 11. Anxiety attack: Anxiety attacks are sudden feelings of panic or fear. Participants will describe these attacks in terms of their symptoms "I felt this way" or "this happened to me." Anxiety attacks are different from general anxiety because they start and stop in short periods of time (e.g., minutes or hours). If this question is coded as "yes", then continue to question #12. If this question is coded as "no", then skip to question #28.
- 12. Four attacks in 4 weeks: This question asks for the consistency of these attacks over time. Count any four attacks during any four-week period of time in her life as "yes". If she answers "no", then ask if she is afraid of having another attack. A "yes" response to either question means that you should continue to question #13. If both of these questions are answered as "no", then skip to question #28.
- 13. Out of the blue: This question asks whether there was an observable or understandable cause of the feeling of fear or panic. Score "yes" when the participant reports that she cannot think of a specific reason or explanation for the panic episode. If this question is coded as "yes", then ask questions 14 to 26. If this question is coded as "no", then skip to question #28.
- 14-26. Symptoms of anxiety: Record "yes" if the participant responds to any of the symptoms, using any related words.

Scoring

Add the total number of "yes" responses to questions 14-26 (if given) and record.

PANIC: During the <u>PAST MONTH</u>:

11.	"Have you had sudden feeling of fear or panic? We call this an anxiety attack."	Yes (Continue)	No ☐ (If No, go to #28)
12.	"Have you ever had four anxiety attacks in a 4-week period?" [If 'No':] "Are you afraid of having another attack?" [Code 'Yes' if 'Yes' to either question.]		(If No, go to #28)
	"Does this feeling sometimes come suddenly and out of the blue [If unclear:] "In situations where you don't expect to be nervous or uncomfortable?"	<u>ue</u> ?" □	(If No, go to #28)
	hink about the last really bad time this happened. During that e, did any of these symptoms happen?"		
14. 15.			
16. 17.	•		
18. 19.			
20.21.	going to have diarrhea?"	were	
22. 23.			
24. 25.			
26.	"Were you afraid you were going crazy or might do something uncontrolled, like shout, urinate, or faint in public?"	,	
A	o the Interviewer: dd the number of "yes" responses for #14 to #26: 7. [Four or more "YES" responses for items #14-#26=Proba Panic Disorder	ıble	Total # of "yes"

Rev. 3/10/2004

Generalized Anxiety

Generalized anxiety refers to general and persistent feelings of nervousness or anxiousness for more than half the days during the last month.

Time frame: MORE THAN HALF THE DAYS IN THE LAST MONTH.

- 28. Nervous, anxious, or on edge: This question assesses a general feeling of being anxious. Participants may use different words (e.g., apprehensive, tense, sensitive, fidgety, unstrung, panicky, agitated, etc.). If the participant answers "yes", then continue to ask questions 29 through 34. If she answers "no", then skip to question #39.
- 29-34. These questions ask about symptoms of anxiety. Record "yes" if the participant expresses any of these symptoms.
- 35. Total the number of "yes" responses. If the total is two or more, continue to question #36. If the total is 0 or 1, go to question #39.
- 36. Hard to do work: This question asks whether the general anxiety symptoms have interfered with daily functioning during the last month. Functioning includes anything that a participant might regularly do. If the participant answers "no", then skip to question #39. If she answers "yes", proceed to #37.
- 37. Worry a great deal: This question asks whether the participant has been worried more than usual about several things in her life. A "yes" may be coded only if this has occurred on more than one half the days in the last month. If "yes", then continue to #38. If "no", then skip to #39.
- 38.a. Had problems for 6 months: This question asks for a time frame for all the symptoms and problems on this page. If the participant cannot remember when the symptoms started, ask for her best guess.
- 38.b. You are asked to classify the anxiety problem depending on the participant's pattern of response. If the answers to Items 36, 37 and 38 are <u>ALL</u> "Yes", the classification is "Generalized Anxiety". If the answer to Item 38 is "No", the classification is "Anxiety Not Otherwise Specified".

GENERALIZED ANXIETY:

28.	"Have you felt nervous, anxious, or on edge <u>ON MORE</u> <u>THAN HALF THE DAYS IN THE LAST MONTH</u> ?"	$\frac{\underline{Yes}}{\square}$ (Continue)	No	<u>Notes</u> GDS #39)
	the last month, have you <u>often</u> (more than half the days) n bothered by any of these problems?"			
29.	"Feeling restless so that it is hard to sit still?"			
30.	"Getting tired very easily"			
"In	the last month, have you often been bothered by"			
31.	"Muscle tension, aches, or soreness?"			
32.	"Trouble falling asleep or staying asleep?"			
33.	the last month, have you often been bothered by "Trouble concentrating on things, like reading a book or watching TV?" "Becoming easily annoyed or irritated?"			
	To the interviewer: 35a. What is the number of "Yes" responses to #29 through #34?	Total # "Yes"	···	
	35. Is the total "yes" number two or more?	(Continue)	☐ (If No, go	to #39)
	"In the last month, have these problems made it hard for you to do you work, take care of things at home, or get along with other people?"	(If	No, go to #	39)
37.	"In the last month, have you been worrying a great deal about different things?" [Code 'Yes' only if 'Yes' to:] "Has this been on more than one half the days in the last month?"	(If	No, go to #	39)
	. "Have you had all of these problems, like feeling nervous, anxious, on edge, and (#29 - #34 that were checked) for as long as six months?"			
	To the Interviewer:	Total # of "Ye	s":	
38b	. Enter total number of "Yes" responses for Items 36 – 38a If number of "Yes" responses = 3 then classify as Probable 0 If number of "Yes" responses <3 then classify as Anxiety, N		-	

Alcohol Abuse

Time frame: During past year unless the question asks otherwise.

- 39.a. Drink alcohol: This questions asks about intake of any alcohol at any time during the past year. Check "yes" if the participant has ever taken in any alcohol during this time frame, even if it was one drink. A drink is considered to be 1 beer, 1 glass of wine, or 1 ounce of other alcohol.
- 39.b. Cut down on drinking: This question asks whether the participant has had any awareness of a possible drinking problem. If the participant expresses confusion about the meaning of "cut down", ask her to use her own definition of "try to cut down" or "cut down on."
- 40. Complain about drinking: This question asks whether anyone in the participant's life has ever criticized her for drinking too much. A "yes" response includes "someone has expressed concern."
- 41. Felt guilty: This question asks about any negative emotions and self-blame the participant has felt about her drinking.
- 42. Five or more drinks: This is a simple frequency question for the consumption of alcohol any single day in the last month.
- 43. Past 6 months: This is a frequency question asking for the consumption of alcohol any single day in the past six months. Note that if the participant answers "yes" to the question, then probe to find out how many times in the past six months she has had 5 or more drinks a day.

Interviewer: If any of the "yes" boxes (shaded) are checked for #39b to #43, continue to ask questions 44 through 48. If none are "yes", go to the GDS (#50).

- 44. These questions ask whether the participant's physician (including primary care provider) has advised her to stop drinking, and if so whether she has stopped drinking because of the advice.
- 45-48. These questions ask about the potential of alcohol's interference with the participant's daily responsibilities or activities. Check "yes" if she indicates more than one time in the past six months when she has experienced each of the events. Remind the participant of the time frame prior to each question if necessary.

Total the "yes" responses from #44-48 and enter them in the space provided.

<u>ALCOHOL ABUSE</u>: "Now I will ask you a few questions about your alcohol use. Some of these you may have been asked before."

39. a. "Did you drink alcohol during the PAST YEAR?"	$\frac{\underline{Yes}}{\square}$ (If No,	No	<u>Notes</u> #50)
b. "Have you thought you should cut down on your drinking?" 40. "Has anyone complained about your drinking?" 41. "Have you felt guilty about your drinking?"			
42. "Have you had five or more drinks on a single day in the past month?"43. "Have you had five or more drinks a day in the past six			
months?" If yes, how many times? times			
To the Interviewer: If one of items 39b-43 are coded 'Yes', then ask #44-48. If 'No' proce	eed to GDS (#50).		
44. a. "Has a doctor ever suggested that you stop drinking because of a problem with your health?"	☐ (If I	□ No, go to #45	5)
b. "If YES, ask "Have you continued to drink during the last six months?"			
"Has any of the following happened to you more than one time in the LAST SIX MONTHS?"			
45. "First, while you were working or taking care of other responsibilities, were you high from alcohol, or hung over?"46. "What about missing or being late for work or other			
responsibilities, because you were drinking or hung over?"			
47. "What about having a problem getting along with other people while you were drinking?"			
48. "What about driving a car after having several drinks or after drinking too much?"			
To the Interviewer:			
49. Enter total number of "Yes" responses for #44 - #48 One or more of items #44 - 48 is coded "yes" = Probable Alcohol	Total yes: Abuse/Dependence	.	

Geriatric Depression Scale (GDS)

Administration

Each one of these questions asks the participant to indicate her feelings during the past week. Record in the appropriate box. If the participant has difficulty choosing between "yes" and "no" for any question, check "yes". If a participant has difficulty with or questions the meaning of a phrase, ask her to use her best judgement. Remind the participant of the 1-week time frame throughout the questions if necessary. Read all questions in a neutral and non-leading manner. Do not encourage responses. Responses such as "true" or "that's right" are acceptable as long as the meaning is clear to the interviewer.

Scoring

Add up the checks in the shaded boxes, and record in the blanks provided. Note: Max = 15.

GDS

Interviewer: Read each statement. Do not elaborate or try to interpret the question. Periodically remind the participant that these questions refer to how they have felt during the <u>past week</u>.

Say: "Now I am going to ask you some questions about how you have felt, in general, during the <u>PAST</u> <u>WEEK</u>. Please answer "yes" or "no." OK? During the past week..."

51.	"Have you basically been satisfied with your life?"	Yes O O I I	No 1 0 0	
Dur	ing the past week			
53.	"Were you often bored?"			
54.	"Were you in good spirits most of the time?"			
55.	"Were you afraid that something bad was going to happen to you?"			
56.	"Were you happy most of the time?"	\square_0		
Dur	ring the past week	_		
57.	"Did you often feel helpless?"		\square_0	
58.	"Did you prefer to stay at home, rather than going out and doing new things?"	$\square_{\scriptscriptstyle 1}$	\square_0	
59.	"Did you feel you had more problems with memory than most?"		\square_0	
Dur	ing the past week		_	
60.	"Did you think it is wonderful to be alive?"		□₁	
61.	"Did you feel pretty worthless the way you are now?"	\square_1	\square_{0}	
62.	"Did you feel full of energy?"		□₁	
63.	"Did you feel that your situation is hopeless?"	$\square_{\scriptscriptstyle 1}$	\square_0	
64.	"Did you think that most people are better off than you are?"		\square_0	
65.	Interviewer: Sum the total shaded boxes. TOTAL GDS SCORE:			
		MAX=	15)	

History of Acquired Cognitive and Behavior Changes

Each of these questions asks about different types of cognitive and behavior changes from the participant's normal functional level.

Time frame: OPEN.

Administration

Read the instructions and ask each question. Record the response to each question in the appropriate box. Try to get the participant to answer "yes" or "no." If the answer is "yes," ask the participant "About how long ago did you first notice this change?" and record the response in number of months. If the participant has no idea or doesn't really know an answer to the original question, check "don't know." If the participant indicates a very small change or an inconsistent change, record as "yes." Answers like "once in a while" or "maybe" should be recorded as "yes."

You can make notes to the clinician on the form, if necessary. Try to avoid interpreting the questions or offering additional examples. It is preferable to repeat the question and let the participant answer the best she can.

History of Acquired Cognitive and Behavior Changes

In this section you will ask the participant about changes in her memory, mood and behavior. Record responses in the appropriate box. Try to elicit a "YES" or "NO" response. If the participant answers "Yes" to any of the questions in this section, ask "About how long ago did you first notice this change?" and record response in number of months.

"Now I'm going to ask you a few questions about difficulties you might be having in your normal daily routine. O.K.?"

			No	Yes	Don't Know	How long ago (months)?
66.	Mei	mory				<u></u>
		you"				
	a.	Had difficulty remembering things that happened recently, in the past				
		few hours or days?	□ ₀	\square ,	\square ,	
	b.	Forgotten conversations that occurred a few hours or days earlier?	□₀			
	c.	Asked the same questions repeatedly?		\square ,	\square_{9}	
	d.	Forgotten to turn off the stove?	□₀		\square_{9}	
	e.	Repeated yourself more?	□₀	□,	9	
67.	Laı	nguage				
		you"				
	a.	Had trouble finding words in a normal conversation?	□。		\square_9	
	b.	Noticed that others have difficulty understanding what you are talking about?			\square_9	
	c.	Incorrectly named familiar things?	□₀			
68.	Per	rsonality or Behavior				
		you"				
	a.	Suddenly become angry or hostile for no apparent reason?	□。	\square	\square ,	
	b.	Heard or seen things that are not there?		\square ,	\square ,	
	c.	Been more irritable or angry?	□。		\square_9	
	d.	Been overly suspicious of others or have you thought others were				
		trying to get you or hurt you when they weren't?	□₀	\square ,	\square ,	
	e.	Withdrawn from social activity or conversations more than usual?				
69.	Ori	ientation for time or place				
"H	ave	you"				
	a.	Had trouble remembering the day of the week or month?	 0		\square_{9}	
	b.	Forgotten or gotten confused about important dates, like holidays,				
		doctor's appointments or days to attend church?	 0		\square_{9}	
	c.	Had trouble finding the bedroom or bathroom at home or in other				
		familiar places (friends' or relatives' houses, restaurants)?	 0		$\square_{_{9}}$	
	d.	Gotten lost in familiar surroundings, such as your neighborhood				
		or in shopping areas?	□。	\square ,		

		No	Yes	Don't Know	How long ago (months)?
70. Ad	ctivities of Daily Living (ADL)	110	105	KHOW	ago (montus):
	e you"				
a.	Had difficulty (or needed help) handling small sums of money, writing				
	checks, or keeping track of bills?	\square_{0}			
b.	Had difficulty (or needed help) shopping (e.g., groceries) etc.?				
c.	Had difficulty (or needed help) operating simple household appliances (e.g. TV,				
	vacuum cleaner, telephone)?	. \square_{\circ}			
d.	Had difficulty (or needed help) performing simple household tasks				
	(e.g.making a cup of coffee, setting the table)?	. $\square_{\scriptscriptstyle 0}$			
e.	Had difficulty (or needed help) preparing meals?	. \square_{\circ}		\square_{9}	
f.	Had difficulty (or needed help) dressing yourself?	. 🔲 。		Δ,	
g.	Had difficulty (or needed help) feeding yourself?	. □ 。		\square_{9}	
h.	Had difficulty (or needed help) grooming yourself?	. 🔲 。		<u></u>	
i.	Had difficulty (or needed help) bathing yourself?	. $\square_{\scriptscriptstyle 0}$			
	ocial, Community, and Intellectual Activities				
a.	Participated less in social or community activities (e.g., going to church, visiting				
	friends) than you used to, for reasons other than physical?	. D ₀		9	
b.	Lost special skills, interests, or hobbies (e.g., sewing, gardening, reading,				
	card games) that you used to do?			9	
c.	Said or done things that are potentially embarrassing to yourself or others?	0		9	
	dgement and Problem-Solving				
a.	Had lapses in judgement, such as responding inappropriately to a salesperson or waitress?	.			
b.	Had difficulties understanding TV shows or newspaper articles?			 ,	
c.	Had more problems than before in organizing a trip or planning a project?	_			
d.	Had difficulty with simple math like adding or subtracting numbers in your head				
	or balancing your checkbook?	. $\square_{\scriptscriptstyle 0}$			
e.	Had trouble knowing what to do when ordinary things go wrong like when a				
	light bulb burns out or when a drain gets plugged?	. $\square_{\scriptscriptstyle 0}$		9	
	lave there been any changes in either your memory or		Notes:		
yo	ur behavior that I have not asked you about?"				
Ļ	a. no other changes				
	b. other changes (please describe):	_			

Summary of Tests

		Test C	<u> Biven</u>	Test Not Given				
		Yes	<u>No</u>	Physical Reason	Not Cooperative	Cognitive Impairment	Other (Specify)	
1.	Verbal Fluency						□ ₅	
2.	Boston Naming				$\square_{\scriptscriptstyle 3}$	$\square_{_4}$		
3.	Word List Memory							
4.	Constructional Praxis		\square ,			$\square_{_4}$	\square_{5}	
5.	Word List Recall				$\square_{\scriptscriptstyle 3}$			
6.	Word List Recognition				\square_3			
7.	Constructional Praxis				$\square_{\scriptscriptstyle 3}$		\square_{5}	
	(Recall)							
8.	Trail Making A	0					5	
	Trail Making B				\square_3			

Data Summary Form: Cognitive Test Battery

<u>Item</u>	Possible Range	Raw Score	<u>Esti</u>	mated P	ercentile	Scores*
			<u>50</u>	<u>Oth</u>	<u>10th</u>	<u>5th</u>
Verbal Fluency	n/a		-	17	12	11
Dastan Namina Tast	0.15			1.4	12	10
Boston Naming Test	0-15		-	14	13	12
Word List Memory						
Trial 1	0-10			5	3	2
Trial 2	0-10			7	5	4
Trial 3	0-10			8	6	5
Total Correct Score 1-				20	14	11
Total # Intrusions	n/a					
	11/ 4					
Constructional Praxis	0-11			11	9	8
	0 11					Ü
Word List Recall						
# Correct	0-10			7	5	3
# Intrusions	n/a					
	14 6					
Savings =						
✓ WORD LIST RECALL	SCORE \					
$\left(\begin{array}{c} WORD\ LIST\ RECALL \\ WORD\ LIST\ TRIAL\ 3 \end{array}\right)$	$\frac{\overline{SCORE}}{SCORE}$) $_{X\ 100}$;	85		48
Word List Recognition						
# correct "Yes"	0-10			10	8	7
# correct "No"	0-10			10	9	8
Constructional Praxis Rec	call 0-11					
Trail Making Test Part A						
Circles Connected	0-25					
Time	0-300					
# Errors	0-5					
II DITOIS	0.5					
Trail Making Test Part B						
Circles Connected	0-25					
Time	0-300					
# Errors	0-5					
II LIIOIS	0-3					

^{*}From: Welsh, et al. <u>Neurology</u>, <u>44</u>, 1994, 609-614. These norms are approximate and have not been stratified by age or education. They should not be interpreted rigidly.

Data Summary Form: Participant Interview

<u>Item</u>	Possible Range	Raw Score	<u>Interpretation</u>
10	0-9		≥ 5 = Probable Major Depressive Disorder
27	0-13,NA		\geq 4 = Probable Panic Disorder
38b	0-3,NA		3 = Probable Generalized Anxiety Disorder < 3 = Anxiety, Not Otherwise Specified
49	0-6,NA		≥ 1 = Probable Alcohol Abuse/Dependence
65	0-15		\geq 5 = Suggestive of Depression
# Items from 66a through 72e scored "Yes"	0-34		